

tioners, psychiatrists, psychologists and social workers, medications and ambulance services. Hospitalization days were obtained from the Canadian Institute of Health Information, and per diem costs were taken from the London Health Sciences Centre in Ontario and from the Psychiatric Specialty Hospital Cost Study. Ambulatory visits were estimated from the Canadian Disease and Therapeutic Index of Intercontinental Medical Statistics; their unit costs correspond to weighted average costs from 5 Canadian provinces. Medication costs were estimated from the Compuscript of IMS. Productivity losses were based on length of depressive episodes obtained from the National Population Health Survey. Based on the literature, we assumed that 1.8 working days/week were lost during their episode. For the remaining working days, productivity was assumed at 80%. Premature mortality costs by suicide were estimated assuming that 60% of suicides were caused by depression. Potential years of life lost were multiplied by average earning taking into account increase of labour productivity, employment rate and a 5% discount rate.

**RESULTS:** The total cost of depression in Canada in 2000 was approximately \$5.4 billions. Direct costs were \$2.1 billions or 39.5% of the burden. Indirect costs were estimated at \$3.2 billions. Mortality costs were \$831 millions, or 15.4%, and productivity losses \$2.4 billions, or 45.1%.

**CONCLUSION:** Based on these estimates, the burden of depression in Canada is important. This sheds light on the economic impact of this incapacitating mental disease.

#### PMH11

### A SWEDISH PHARMACOECONOMIC EVALUATION OF ESCITALOPRAM, A NEW SSRI: COMPARISON OF COST-EFFECTIVENESS BETWEEN ESCITALOPRAM, CITALOPRAM, FLUOXETINE AND VENLAFAXINE

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**OBJECTIVES:** The purpose of this study is to assess the cost-effectiveness of escitalopram, a new selective serotonin reuptake inhibitor (SSRI), versus citalopram, fluoxetine, and venlafaxine in Sweden.

**METHODS:** Cost-effective analysis is performed using a two-path decision analytic model with a 6-month horizon. Patients start at the primary path, and are referred to specialist care in the secondary care path. This is typical of a GP/Psychiatrist setting. Model inputs include drug-specific probabilities from comparative trial data, published literature, and a clinical experts' panel. The primary outcome measure is 'success', defined as patients in remission 6 months after the start of treatment. The model combines success rates and expected costs to calculate the cost-effectiveness ratios. The estimated number of patient episodes during each drug treatment (using IMS volume sales) are combined with the average 6-month per-patient expected costs of treat-

ment (total and drug costs) to estimate the effect of the introduction of escitalopram on the health care budget.

**RESULTS:** Treatment of Major Depressive Disorder with escitalopram yielded a lower expected cost and greater effectiveness compared to other SSRIs and SNRIs. The expected success rate (remission) was 63.5% for escitalopram, compared to 57.2%, 57.0%, and 61.1% for citalopram, fluoxetine, and venlafaxine, respectively. Average expected total medical costs per patient are similar for escitalopram (SEK 15,670) and venlafaxine (SEK 16,580), and somewhat higher for citalopram and fluoxetine (SEK 18,860 and 19,050 respectively). Budgetary impact shows that the increase in drug costs (increase in Drug Budget estimated at SEK 44 million) is more than offset by the decrease in other health care costs (decrease in total Health Care Budget estimated at SEK 543 million).

**CONCLUSIONS:** Escitalopram is a cost-effective treatment alternative to citalopram, fluoxetine, and venlafaxine. The results of this study indicate that increased utilisation of escitalopram might reduce health care costs in Sweden.

#### PMH12

### EMPLOYMENT-RELATED COSTS OF INFORMAL CAREGIVING FOR ALZHEIMER'S DISEASE PATIENTS: EFFECTS OF RIVASTIGMINE TREATMENT

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While several studies have measured the direct costs of informal caregiving for Alzheimer's patients, indirect costs such as income losses to working caregivers and productivity costs to their employers have received little attention.

**OBJECTIVES:** This study estimates employment-related costs of caregiving for Alzheimer's patients and the effects of the cholinesterase inhibitor, rivastigmine, on these costs.

**METHODS:** Employment-related costs of informal Alzheimer's caregiving were imputed from several studies on Alzheimer's and caregiving, including findings from the NAC/AARP survey of family caregivers. Published employment-related costs, which applied to all caregivers of the elderly, were made Alzheimer's specific and differentiated by disease stage. These estimates were linked to clinical trial scores (Progressive Deterioration Scale) for rivastigmine to estimate savings in employment-related costs associated with this Alzheimer's therapy.

**RESULTS:** Productivity costs to employers per working, informal Alzheimer's caregiver are \$2,187 yearly, while yearly income losses to working caregivers are \$11,525. Total productivity costs to employers are \$1.89 billion annually while total income losses to caregivers are \$9.96 billion annually. Employment-related costs are highest for informal caregivers of Alzheimer's patients in the moderate disease stage because of a higher concentration